

Kunal Shamsundar Joshi

Address:

1819 W Pensacola Street Apt #D03
Tallahassee, FL 32304

Phone: **850.319.2674**

Email Id: ksj10e@my.fsu.edu

EDUCATION:

Florida A&M University, Tallahassee, FL, January 2014 – Present (Doctor of Philosophy)

Florida State University, Tallahassee, FL, January 2011 – December 2013 (Master of Science)

University Of Pune, Pune, India, June 2003 - August 2008 (Bachelor of Engineering)

WORK EXPERIENCE:

Florida A&M University & High Performance Materials Institute January 2014 – Present
Graduate Researcher (Tarik Dickens, Ph.D.)

- Developing triboluminescence based structural health monitoring for composites in civil infrastructure
- Managing the Industrial composite engineering and testing lab
- Developed remote access and currently managing simulations lab
- Conducted Solidworks undergraduate class for Engineering Practicum
- 2015 SAMPE student research symposium finalist

Florida State University & FDOT August 2011 – December 2013
Graduate Researcher (Michelle Roddenberry, Ph. D., PI)

- Investigated influence of Carbon fiber composite cable (CFCC) during Pile driving
- Successfully carried research on replacing reinforcing steel with CFCC
- Design being currently used for pile construction in Tampa

Florida Department of Transportation Structures Laboratory March 2013 – December 2013

- Designing specifications for Testing of Materials
- Developing test Setups for current research work in Florida

Aker Solutions Pvt. Ltd, Pune, India August 2008 –November 2010
Engineer

Major Projects worked on:

- *Bio-Ethanol Project for Vivergo Fuels at Salt End, UK*
- *L'Oreal expansion Project at Chakan, Pune , India*
- *Unilever Sri Lanka Project , Sri Lanka*
- *Maersk Oil Qatar Off shore Project, Qatar*

3D Printer Development Team, Florida State University Sept. 2011 – March 2013
Team lead

- Programming via Python language
- Promoting students to use auto-cad to prototype 3D structures

JOURNAL PUBLICATIONS

Michelle Rambo-Roddenberry; **Kunal Joshi**; Sam Fallaha; Rodrigo Herrera; Raphael Kampmann,; Jon Chipperfield; Primus Mtenga,” Construction, Strength, and Driving Performance of CFRP-Prestressed Concrete Piles” *Submitted Journal of Composites for Construction*

Joshi, K., and Dickens, T. J. "A Review of FRP application and progress of structural health monitoring (SHM) in Civil Infrastructure” SHM-15-0084 (2015) *Sage publications [submitted]*

CONFERENCE PAPERS AND PUBLICATIONS

Joshi, Kunal, Jolie B. Frketic, Meagan Raley, TJ Dickens, “Screening Failure Detection of Structural Composite Systems: Embedded Triboluminescent Structronic Wires” *IWSHM 2015*

Joshi, Kunal, Jolie B. Frketic, David Olawale, and Tarik Dickens. "Damage monitoring of CFRP retrofits using triboluminescent optical fiber sensors." *In SPIE Smart Structures and Materials+ Nondestructive Evaluation and Health Monitoring*, pp. 943520-943520. *International Society for Optics and Photonics, 2015*

Roy, M., **Joshi, K.**, Ndebele, T., Williams K., Olawale D., and Dickens T. J "Preliminary Investigation: Additive Manufacturing of Soluble Mold Tooling for Embedded Devices in Composite Structures” *CX1-47807 (2014)*

Joshi, K., Frketic, J., Olowale, D., and Dickens T.J.” Damage monitoring of CFRP retrofits using triboluminescent optical fiber sensors and Finite element methods” *2015 SAMPE Student research symposium “*

Michelle Rambo-Roddenberry; **Kunal Joshi**; Sam Fallaha; Rodrigo Herrera; Raphael Kampmann,; Jon Chipperfield; Primus Mtenga,” Performance of CFCC-Prestressed Concrete Piles” *2016 PCI Convention and National Bridge Conference*

SKILLS

- Extremely proficient with Abaqus programming language “Python”
- Highly capable and proficient working in STAAD Pro
- Proficient with Digimat
- Proficient with RISA3D (Structural Analysis Software)
- Proficient with AutoCAD 2009 Basic/Civil

ACTIVITIES:

- Jury member for ASCE Wind Engineering Competition - “Wind Resisting Structures” – 2012
 - Jury member for ASCE Bridge Competition – “ Bridge building and testing” - 2012
-

REFERENCES AVAILABLE UPON REQUEST